

the apical truncation characteristic of the subgenus (*Melanoconion*). It is close to *Culex* (*Mel.*) *pilosus* Dyar and Knab in being very short, about four times as long as the apical width. The abdominal chaetotoxy is shown in Plate II.

Culex iolambdis is related to the true *Culex elevator* Dyar and Knab and *Culex educator* from Central and South America. The writers know of no definite characters to separate the larvae of *iolambdis* and *elevator* at the present time. However, the mental plate of the larva of *C. educator* has five teeth on either side of the strong central tooth, while that of *iolambdis* has seven. *Educator* has a huge gill near the base of the antenna according to Komp (1935) while such a structure is absent in *iolambdis*. In Panama *educator* larvae always are found in fresh water, while *iolambdis* larvae have been collected only in brackish water.

The male terminalia recently have been figured by Rozeboom and Komp (1950) in their comprehensive review of the male *Culex* (*Melanoconion*) mosquitoes. The characters for separating *iolambdis* from other species in the subgenus are appreciated best by a study of their key and drawings.

REFERENCES

- Komp, W. H. W., 1935. Notes on the validity of the types of the species in the subgenera *Mochlostyrax* and *Melanoconion* in the U. S. National Museum. Proc. Ent. Soc. Wash. 37(1): 1-11.
- Rozeboom, L. E. and W. H. W. Komp, 1950. A review of the species of *Culex* of the subgenus *Melanoconion*. Ann. Ent. Soc. Am. 43(1): 75-114.
- Wirth, W. W., 1945. The occurrence of *Culex* (*Melanoconion*) *elevator* Dyar and Knab in Florida, with keys to the *Melanoconions* of the United States. Proc. Ent. Soc. Wash. 47(7): 199-210.

A NEW MITE OF THE GENUS NEOICHORONYSSUS

(ACARINA, LAELAPTIDAE)

BY R. B. EADS AND B. G. HIGHTOWER, *State Department of Health,
Austin, Texas*

A new species of mite referable to the genus *Neoichoronyssus* is described in this paper. Several specimens were taken from kangaroo rats, *Dipodomys ordii*, during west Texas plague studies which were conducted jointly by the U. S. Public Health Service (Communicable Disease Center) and this Department.

Neoichoronyssus (Hirstionyssus) incomptus, new species

Female.—Body broadly oval in outline, widest behind coxa IV. The measurements given below are in microns and indicate the average of

the holotype and 2 paratypes. Total length, exclusive of gnathosoma, 579; width of body at widest point, 406; length of dorsal plate, 481; width of dorsal plate, 240; length of genitoventral plate, measured from posterior margin of sternal plate to the tip of the genitoventral plate, 239; distance from posterior margin of genitoventral plate to anterior margin of anal plate, 96.

Dorsal plate almost covering dorsum anteriorly, but evenly tapered to a blunt point posteriorly, with about 25 pairs of setae which tend to be longer on the anterior half of plate. Unsclerotized portion of dorsum with about 17 pairs of subequal setae which are slightly shorter than the setae on the posterior portion of the dorsal plate.

The peritremal tube extends from the anterior part of coxa IV to the middle of coxa I.

Sternal plate about 8 times as wide as long, 3 pairs of sternal setae present, the first and second pair subequal and longer than the third pair. Genitoventral plate rounded posteriorly, widest midway between insertion of genitoventral pair of setae and caudal margin. Distance between the genitoventral and anal plates approximately equal the length of the anal plate. Anal plate oval, sides convex; anal setae subequal in size. Unsclerotized portion of venter with about 17 pairs of subequal setae which are slightly longer than the corresponding dorsal setae.

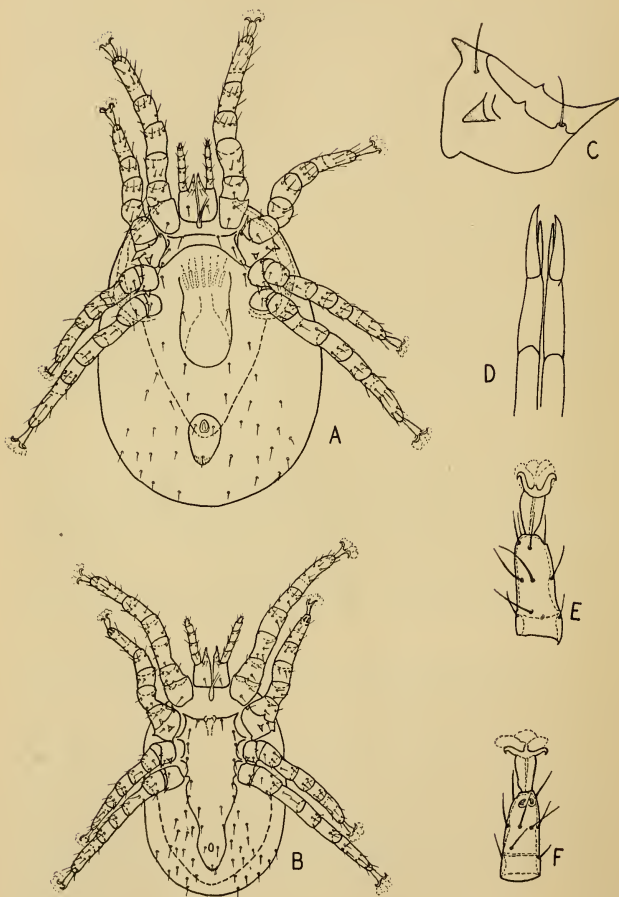
Coxa I with a ventral and a submarginal seta. Coxa II with antero-dorsal spur, a caudo-dorsal and a rounded ventral spur, also a marginal seta, and a seta flanked by the 2 latter spurs. Coxa III with a seta on the anterior margin, a large ventral spur, a smaller spur on the posterior margin, and a seta situated between the spurs. Coxa IV with a submarginal seta. Tarsus II without modified setae.

Chela shear-like, fixed arm slightly longer than movable arm. Hypostome with 4 pairs of typical setae. Capitular teeth about 20, in two rows.

Male.—The measurements indicate the average of the allotype and 2 paratypes. Total length, exclusive of gnathosoma, 429; width of body at widest point, 274; length of dorsal plate, 396; width of dorsal plate, 211; length of holovertral plate, 301.

Dorsal plate covering the dorsum anteriorly, but slightly narrowed laterally, with 26 pairs of setae which tend to be longer anteriorly. About 12 pairs of subequal setae on the unsclerotized portion of the dorsum, these as in the female, are slightly shorter than the setae on the posterior portion of the dorsal plate. Peritreme as in female.

Holovertral plate as illustrated, slightly expanded behind coxa IV, and constricted before the anus, with 8 pairs of setae in addition to the 3 anal setae. The paired setae on the holovertral plate are longer anteriorly. Unsclerotized portion of the venter with about 15 pairs of setae which are subequal in length to the setae on the posterior portion of the holovertral plate and slightly longer than the corresponding setae on the dorsum.



Neoichoronyssus (Hirstionyssus) incomptus, new species. Fig. A, female venter; fig. B, male venter; fig. C, female coxa II; fig. D, female chelicera; fig. E, female tarsus II; fig. F, male tarsus II.

Coxa I with a ventral and a submarginal seta. Coxa II with a marginal (anterior) and a submarginal (posterior) seta, an acute anterior-dorsal spur, a short ventral spur, and a short, stout caudo-dorsal spur. Coxa III with a marginal (anterior) and a submarginal (posterior) seta, an acute spur on the posterior margin, and a ventral spur. Coxa IV with a submarginal seta ventrally, and an acute, marginal spur near the caudal edge. Tarsus II with a subapical pair of modified setae.

Gnathosoma similar to female. Chela with movable arm longer and stouter than fixed arm. Capitular teeth about 22, in 2 rows.

Types.—All from Texas: Holotype female from kangaroo rat, *Dipodomys ordii*, 16 January, 1947, Terry County, V. I. Miles. Paratype female, same host, 5 March, 1948, Dawson County, V. I. Miles. Paratype female, same host, 21 April, 1948, Cochran County, W. H. Williams & T. Crossland. Allotype male from *Dipodomys ordii*, 3 March, 1948, Dawson County, V. I. Miles. Paratype male, same host, 11 March 1949, Gaines County, V. I. Miles. Paratype male from *Perognathus* sp., 15 January, 1947, Gaines County, T. S. Scoggins. Holotype female and allotype male deposited in U. S. National Museum, number 1976.

Remarks.—In Jameson's key (1950) to the female of North American species of *Neoichoronyssus*, *N. incomptus* runs to the couplet containing *N. hilli* (Jameson) and *N. triacanthus* (Jameson). *N. triacanthus* possesses heavy body setae and thick peritremal tubes, while in *hilli* and *incomptus* the body setae are short and slender, and the peritremal tubes relatively narrow. *N. incomptus* is distinctive in that its peritremal tubes extend forward to coxae I, and the sternal plate is almost 8 times as wide as long; in *hilli* the peritremal tubes extend only to coxae II and the sternal plate is about 5 times as wide as long. It is worthy of note that the male of *N. incomptus* possesses stout, ventral setae on tarsus II, while in the female these are lacking.

Acknowledgments are due Dr. R. W. Strandtmann for his helpful advice and loan of a paratype of *N. hilli*.

REFERENCE

- Jameson, E. W. 1950. Notes on mites of the genus *Neoichoronyssus*, with the description of a new subgenus and three new species of the subgenus *Hirstionyssus*. Proc. Ent. Soc. Wash. 52(4): 161-172.